

In re Application of:  
Jay M. Short  
Application No.: 09/835,096  
Filed: April 12, 2001  
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PATENT  
ATTY. DOCKET NO.: INVIT1250-5

**AMENDMENT**

**Amendments to the Specification:**

Following the abstract, please insert the attached Sequence Listing with subsequent page numbering thereafter.

Please replace full paragraph at page 58, line 34 bridging to page 59, line 8 with the following amended paragraph:

1. Synthesis of degenerate single stranded DNA oligonucleotides (template to generate the scaffolds) : Synthesis and purification of a degenerate oligonucleotide pool of the type A-Z-B is performed by standard methods (phosphoamidate chemistry, trityl off/on cartridge purification, HPLC, capillary electrophoresis). A denotes the following constant 18-mer 5' flanking region of the sequence: 5'AAA CCA GCA AAA ACA AAA3' (SEQ ID NO:1); Z denotes a variable 34-mer core, called the "Morphacore" sequence, with A, C, G, and T occurring in variable but typically equal ratios at every position; and B denotes the following constant 18-mer 3' flanking region of the sequence: 5'AGA AAG AAA GAG CAA ACA3' (SEQ ID NO:2)

Please replace full paragraph at page 59 (lines 19 to 31) with the following amended paragraph:

3 . Amplification of degenerate synthetic DNA oligonucleotide from step 1 by polymerase chain reaction (PCR) including incorporation of the linker base during the amplification reaction: PCR is performed under the following conditions:

250 µM of each dATP, dGTP, dCTP

250 µM phenylboronic acid dUTP

0.5 µM forward primer 5'AAA CCA GCA AAA ACA AAA3' (SEQ ID NO:1)

0.5 µM reverse primer 5' biotin-TGT TTG CTC TTT CTT TCT3' (SEQ ID NO:3).

5 mM tris(hydroxymethyl) aminomethane/HCl pH 9.0

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60 mM potassium chloride  
10 mM magnesium chloride  
2 ng/ $\mu$ l 70mer degenerate oligonucleotide from step 1

Please replace full paragraph at page 72 (lines 6 to 8) with the following amended paragraph:

Schultze, P., Macaya, R.F. and J. Feigon (1994) Three-dimensional solution structure of the thrombin-binding DNA aptamer d(GGTTGGTGTGGTTGG) (SEQ ID NO:4). J. Mol. Biol. 235, 1532-1547.